UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 12 2007

Mr. Dennis Rice
Office of Surface Mining Reclamation and Enforcement
Administrative Record, Room 252 SIB
1951 Constitution Avenue, NW
Washington, DC 20240

RE: RIN 1029-AC04

Dear Mr. Rice:

In accordance with our responsibilities under section 102(2)(C) of the National Environmental Policy Act and section 309 of the Clean Air Act, and pursuant to our responsibilities under section 501(b) of the Surface Mining Control and Reclamation Act of 1977 (SMCRA), the Environmental Protection Agency (EPA) has reviewed the Office of Surface Mining Reclamation and Enforcement's (OSM's) Draft Environmental Impact Statement (EIS) and proposed revisions to the Permanent Program Regulations Concerning the Creation and Disposal of Excess Spoil and Coal Mine Waste and Stream Buffer Zones, (30 CFR Parts 780, 784, 816, and 817), published in the *Federal Register* on August 24, 2007. EPA appreciates the opportunity to work with OSM in the development of this rule, and OSM's efforts to include several improvements in the current proposal. Our comments on the draft EIS, and our comments on and recommended revisions to the proposed rule, are presented herein.

The draft EIS evaluates the "No Action" Alternative and four Action Alternatives. The Preferred Alternative (1) proposes revisions that require the use of the "best technology currently available" (BTCA), and consideration of alternatives for spoil and coal waste placement with the least environmental impact. Also, the preferred alternative clarifies which mining activities (e.g., stream crossings, sediment ponds, permanent excess spoil fills, and coal waste disposal facilities) within the 100 foot stream buffer are exempt from the rule. Further, coverage of the buffer zone would be changed to "waters of the United States", adding lakes, ponds and adjacent wetlands to intermittent and perennial streams.

Comments on the Draft EIS

While the draft EIS provides a good overview of the alternatives, existing environment, coal mining industry and the regulatory environment, EPA recommends that the final EIS provide additional quantitative information and analysis so that the impacts and/or the environmental benefits that might occur if the proposed rule is adopted can be predicted. Specifically, there is minimal discussion of the environmental impacts related to the alternatives, and how the proposed changes to the rule will improve water quality and reduce adverse environmental impacts. In particular,

- While acknowledging that many activities contribute to the poor quality of 55% of wadeable streams in the Southern Appalachian Area (US EPA 2006), EPA recommends that the final EIS provide a quantitative estimate of how much impact is related to mining activities that would be covered under the rule.

- Also, in its discussion of the No Action Alternative, the draft EIS predicts that "if valley fills continue to be constructed at this rate, an additional 724 miles of headwater streams would be buried by 2018". We recommend that the document describe the potential environmental impact that would result from that loss.

- Chapter III states that increased sedimentation and dissolved chemical constituents, including nitrogen, a decrease of organic matter such as coarse and fine particulates, and changes in thermal character and flow occur as a result of coal mining, (p.117). EPA suggests that this information be integrated into the environmental analysis of the alternatives.

- Table IV uses a scoring system to characterize impacts described by subjective terms that are not defined. Because the environmental impacts of coal mining are well known and studied, we recommend that the final EIS provide an analysis of the comprehensive scientific data to predict anticipated impairment of hydrologic flow and effects on down stream aquatic biota and impacts to water quality, which reflect existing technical information and experience with the environmental effects associated with surface coal mining activities.

- In addition, EPA recommends that the final EIS further discuss the process that will be used to analyze the fill alternatives and how the least adverse placement will be determined.

The draft EIS correctly states that the No Action alternative has resulted in adverse environmental impacts, including exceedances of water quality standards, impairment of streams, reduction of habitat for aquatic and migratory birds, and adverse impacts on downstream stream biota. It also states that the proposed rule "...will lessen the adverse environmental effects stemming from excess spoil fill construction" and "would result in disturbance of smaller areas." EPA believes that the final EIS should include a quantitative estimate of what reduction might be expected to occur based on current

levels of mining under the preferred alternative in the central Appalachia coal fields, the focus of this rule. For example, how many fewer acres of fill there will be, or fewer impaired streams, increased miles of stream habitat, increased biotic diversity, or other commonly used metrics.

Comments/Recommendations on the Proposed Rule

EPA has reviewed the proposed rule language for the Permanent Program Regulations Concerning the Creation and Disposal of Excess Spoil and Coal Mine Waste and Stream Buffer Zones (30 CFR Parts 780, 784, 816, and 817). We offer the following comments and suggest changes on the following five sections of the rule:

Alternatives Analysis for Mining Through Waters of the U.S. and Stream Diversions

EPA supports OSM for incorporation of a requirement to analyze alternative disposal methods and locations for coal mine waste impoundments and refuse piles under section 780.25(d)(1)[1] and for the disposal of excess spoil under section 780.35(a)(3). We also support the requirement for the applicant to select the alternative that would have the "least overall adverse environmental impact, including adverse impacts on water quality and aquatic ecosystems, to the extent possible," as well as the additional guidance that has been provided to determine what alternatives are considered "possible." Further, we support the inclusion of specific evaluation factors that must be considered when a proposed activity would involve waters of the U.S., including the option to submit an alternatives analysis prepared under the Clean Water Act (CWA) Section 404(b)(1) Guidelines [40 CFR 230.10(a)]. These requirements will help better harmonize the SMCRA and CWA regulatory programs, resulting in a more efficient permitting process for both the regulated community and regulatory authorities.

OSM is seeking comment on whether the rule should include a requirement for submission of alternatives and an analysis of the environmental impacts of each alternative when an applicant proposes to mine through waters of the U.S. or divert perennial or intermittent streams (72 FR 48906). We fully support the inclusion of such a requirement for *both* mining through streams and stream diversions. These activities often have adverse impacts, including direct losses of stream function and resulting alteration of downstream hydrology, water chemistry, and biotic communities, which are presently occurring and would be expected to continue in the same trend under the proposed rule. According to the draft EIS, OSM does not anticipate a major shift in on-the-ground consequences from the proposed changes to the stream buffer zone regulations. These changes include exempting mining through streams from the 100-foot buffer zone prohibition. EPA believes the potential for significant environmental degradation from mining through streams and stream diversions could be minimized through an analysis of alternatives. Requiring an alternatives analysis for mining through steams and stream diversions will also support the use of Nationwide Permit 21, as recently issued by the U.S. Army Corps of Engineers (Corps). That permit defers to the

[1] All comments throughout this letter regarding surface mining activities also apply to the parallel provisions for underground mining activities (which have been omitted for ease of reference).

analysis under SMCRA, and making the SMCRA analysis consistent with the alternatives analysis under the CWA [specifically, the Section 404(b)(1) Guidelines at 40 CFR Part 230.10(a)] would justify that deference.

We note that the preamble discusses various alternatives for stream diversions, but does not include examples for mining through streams. We suggest that alternatives to mining through streams could vary with respect to number and length of stream segments impacted, construction technique, reclamation design, and location (including alternate sites/coal seams in lieu of the proposed site/coal seam). We recognize that in certain areas, particularly in the Appalachia, avoiding streams is not possible. However, in other parts of the country, such as the western states, such practices have been considered by EPA and the Corps under the CWA Section 404 analysis for mining proposals.

Avoidance and minimization

Sections 780.25(d)(2) and 780.35(a)(4) require permit applications to include a description of the steps that will be taken to avoid and minimize the adverse environmental impacts that may result from the construction of fills, refuse piles, or coal mine waste impoundments. As the rule is currently structured, this is an independent requirement that stands alone from the alternatives analysis required under Sections 780.25(d)(1) and 780.35(a)(3), respectively. Further, the preamble (79 FR 48899 and 48904) specifies that the requirement to avoid and minimize adverse environmental impacts applies only to the alternative selected as having the "least overall adverse environmental impact, including adverse impacts on water quality and aquatic ecosystems, to the extent possible." It is our understanding that OSM structured the rule in this format so that the avoidance and minimization requirement would apply to the construction, maintenance and reclamation of the selected alternative.

As we have discussed in our previous comments, EPA continues to recommend that avoidance and minimization be incorporated into the alternatives analysis required under Sections 780.25(d)(1) and 780.35(a)(3). The intended purpose of the alternatives analysis is to determine the means by which excess spoil, refuse, and coal mine waste could be disposed of with the least adverse environmental impact. This implies that resources would be avoided and impacts would be minimized to the extent practicable. Thus, it is not clear how the requirement to avoid and minimize adverse environmental impacts contained in Sections 780.25(d)(2) and 780.35(a)(4) differ from what would be expected as part of the alternatives analysis under Sections 780.25(d)(1) and 780.35(a)(3). Further, we recommend removal of the preamble language that specifies that the avoidance and minimization requirements in Sections 780.25(d)(2) and 780.35(a)(4) only apply to the alternatives selected under Sections 780.25(d)(1)(C) and 780.35(a)(3)(iii). These changes would reduce potential uncertainty regarding the appropriate factors to consider in the alternatives analysis, and would reinforce the requirement to evaluate different project locations and design elements when assessing the viability and environmental impacts of each alternative. Under the CWA Section 404(b)(1) Guidelines, demonstration of avoidance is satisfied through the alternatives test outlined in 40 CFR Part 230.10(a). Thus, avoidance drives selection of the "least environmentally damaging practicable

alternative," which is the only alternative that can be permitted under CWA Section 404. We believe that taking into account avoidance and minimization in the selection of the alternative with the "least overall adverse environmental impact" would help coordinate the processing of permits applications under SMCRA and the CWA. Further, because the SMCRA permit covers all phases of a mining project (i.e., construction, maintenance, and reclamation), consideration of avoidance and minimization as a component of the alternatives analysis in the permit review would consistently apply the requirement to all phases of the mining project.

One important potential benefit of applying the avoidance requirement as part of the alternatives analysis would be to improve the effectiveness of the mine design and permitting process to help address issues related to the attainment and maintenance of downstream water quality standards in the watershed. Data increasingly demonstrate that water quality downstream of valley fills in Appalachia is often degraded, resulting in water quality standards excursions and the listing of streams as impaired. However, when these degraded streams join with other streams that have high water quality, the confluence has the potential to reduce (via dilution) the adverse aquatic life impacts from the valley fills in the lower reaches of the watershed. EPA believes that preventing degradation of certain high quality streams can be critical to the overall health of the watershed. We believe SMCRA permitting authorities – typically state agencies – could more effectively engage existing State water quality standards programs to identify the location and prioritize the protection of high quality streams in specific watersheds. This information could inform the alternatives analysis performed under SMCRA and CWA for the authorization of valley fills (as well as mining through streams). For example, coal mining companies and SMCRA permitting agencies could use this information to design mine plans to avoid surface related impacts to these high quality resources, thereby helping to maintain water quality standards in a network of streams throughout the watershed. Where states do not have established data, identification of high quality streams in the watershed could be done collaboratively by EPA, the Corps, OSM and the State to facilitate SMCRA and CWA permit reviews. We believe the preamble and rule could be improved by incorporating a discussion of how strategic mine design and stream preservation efforts could reduce adverse impacts to water quality on a watershed basis. We would be happy to assist OSM in developing specific preamble and/or rule language to address this issue.

Minimization Measures for the Disposal of Excess Spoil

In the preamble (79 FR 48904), OSM anticipates that operation plans will include provisions to require that, when consistent with prudent engineering practice and applicable regulatory requirements, excess spoil placement begin at the highest elevation of the planned fill and proceed down the valley to the toe of the fill in order to minimize both impacts to waters of the United States and the area affected in the event the full design capacity of the fill is not needed. OSM is seeking comment on whether this provision should be incorporated into the rule language. EPA commends OSM for including this consideration in the preamble and fully supports incorporating this approach into the rule language to ensure its application whenever possible.

Clean Water Act Authorizations

EPA commends OSM for integrating references to CWA authorizations for activities that are permitted under SMCRA, and for specifying that necessary CWA authorizations must be obtained prior to initiating any activity that requires such authorizations or certifications [Sections 780.28(f) and 816.57(d)]. We believe cross-referencing CWA requirements will greatly facilitate the coordination of permitting activities under the CWA and SMCRA. OSM is seeking comment on whether to require the inclusion of this provision as a SMCRA permit condition (79 FR 48901). EPA fully supports incorporating this obligation as a condition for SMCRA permits. We believe this would ensure proper CWA authorizations are obtained, especially since specific references to compliance with water quality standards and prevention of significant degradation of aquatic resources have been removed in the proposed rule.

Conclusion

We support proposed rule changes that would minimize the adverse environmental effects from the disposal of excess spoil and coal mine waste and the publication of a rule that is clear and readily understood. We agree that these objectives would be best achieved in a manner that ensures improved consistency between regulation under the SMCRA and the CWA. However, based on the information presented that indicated the potential for environmental impacts we have rated the draft EIS as Environmental Concerns and Insufficient Information (EC-2) (a *Summary of EPA Rating Definitions* is enclosed). EPA appreciates the opportunity to work with OSM in the development of this rule, especially in light of our responsibilities under section 501 of SMCRA. In discussions with OSM, EPA resolved several of our initial concerns about the proposed rule language which were reflected in the rule published in August 2007. We understand these changes will be reflected in the final EIS.

Thank you for the opportunity to review this draft EIS and proposed rule. If you have questions about our comments on the draft EIS or the proposed rule, please contact Elaine Suriano at 202-564-7162 or Tanya Code at 202-566-1063, respectively.

Sincerely,

Anne Norton Miller
Director
Office of Federal Activities

Craig Hooks
Director
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Enclosure